NILS

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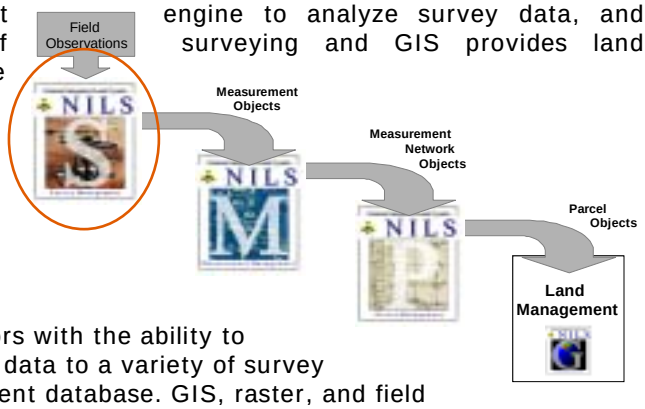
National Integrated Land System

The National Integrated Land System (NILS) is a joint project between the Bureau of Land Management (BLM); USDA Forest Service (USFS); and state, county, and private organizations. NILS will provide a business solution to land managers who face an increasingly complex environment of complicated transactions, legal challenges, and deteriorating and difficult-to-access records.

As part of the NILS solution, the worlds of surveying and GIS technology will be unified through a nationwide data model, in-field computing tools, a measurement management engine to analyze survey data, and parcel creation and maintenance tools. The integration of surveying and GIS provides land managers with a complete field–to-fabric technology solution. The Survey Management and Measurement Management applications provide the foundation for a highly controlled parcel fabric.



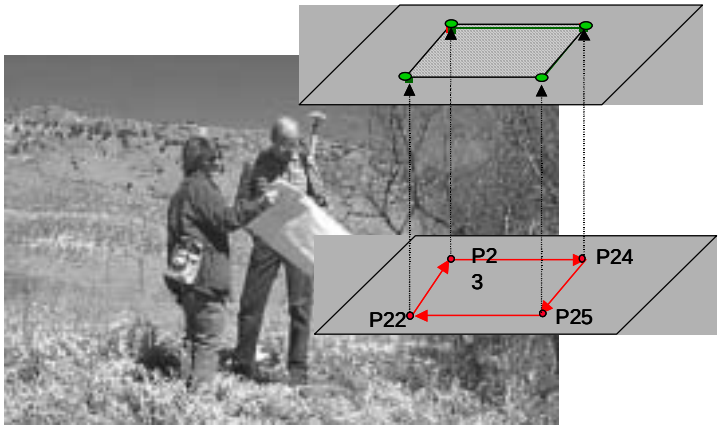
Survey Management

Survey Management is a set of applications that provides surveyors with the ability to manage survey data collected in the field. It allows for exporting data to a variety of survey equipment and for importing data back into the Survey Management database. GIS, raster, and field data are all integrated within Survey Management for data validation and decision making while in the field. Survey Management provides field surveyors with tools to research survey data that can be taken into the field. Additional tools assist in the calculation of field data and observations. A subset of coordinate geometry and layout calculation tools are also be available. The initial release of Survey Management was September 2002.

Survey Research – includes tools to search for survey record data. The search can be Internet based, through GeoCommunicator or Geodata.gov, or can be a manual process searching through jurisdictional documents. Digital data sets can be included in the survey project.

Pre-Field Survey Setup – creation of setup files and parameters to prepare instrumentation to take into the field. This includes establishing survey data sets.

In-Field Survey Setup – allows surveyors to perform multiple surveys while in the field. At the completion of the in-field survey setup, the surveyor is ready for station orientation and the collection of readings, observations, and measurements.



Collect Field Data Observations – allows surveyors to sight features, capture readings, and process readings to derive measurements. A surveyor can sight to and traverse from point to point as needed to derive the geometry and attributes of the subject features.

Perform COGO and Layout – provides surveyors with coordinate geometry (COGO) calculation methods and procedures. Surveyors can perform computations in the field to locate and calculate coordinates for physical features such as monuments, buildings, and watercourses.